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**UTILITY PATENT APPLICATION TRANSMITTAL**

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Attorney Docket No. 003801.P025Total Pages 2First Named Inventor or Application Identifier Jennifer Pearson, et alExpress Mail Label No. EL627463992US

**ADDRESS TO:** Assistant Commissioner for Patents  
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**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

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2. X Specification (Total Pages 23)  
(preferred arrangement set forth below)
  - Descriptive Title of the Invention
  - Cross References to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to Microfiche Appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claims
  - Abstract of the Disclosure
3. X Drawings(s) (35 USC 113) (Total Sheets 6)
4. X Oath or Declaration (Total Pages 5)
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  - b.      Copy from a Prior Application (37 CFR 1.63(d))  
(for Continuation/Divisional with Box 17 completed) (**Note Box 5 below**)
  - i.      **DELETIONS OF INVENTOR(S)** Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
5.      Incorporation By Reference (useable if Box 4b is checked)  
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
6.      Microfiche Computer Program (Appendix)
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jc844 U.S. PTO  
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NAME Sheryl Sue Holloway, Reg. No. 37,850  
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

ADDRESS 12400 Wilshire Boulevard  
Seventh Floor

CITY Los Angeles STATE California ZIP CODE 90025-1026  
Country U.S.A. TELEPHONE (408) 720-8598 FAX (408) 720-9397

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Serial/Patent No.: \*\*\* Filing/Issue Date: \*\*\*  
Client: eBay, Inc.  
Title: DYNAMIC SELECTION OF IMAGES FOR WEB PAGES

BSTZ File No.: 003801.P025 Atty/Secty Initials: ALM/SSH/mb  
Date Mailed: June 7, 2000 Docket Due Date: \*\*\*

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UNITED STATES PATENT APPLICATION

for

DYNAMIC SELECTION OF IMAGES FOR WEB PAGES

Applicants:

Jennifer Pearson  
Bill Wang

prepared by:

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN  
12400 Wilshire Boulevard  
Los Angeles, CA 90026-1026  
(408) 720-8598

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# **DYNAMIC SELECTION OF IMAGES FOR WEB PAGES**

## **FIELD OF THE INVENTION**

This invention relates generally to content displayed as pages on the World Wide Web,  
5 and more particularly to selecting images as part of such content.

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## **BACKGROUND OF THE INVENTION**

Images are frequently used on World Wide Web (web) pages as illustration and to  
make the pages more attractive. Both purposes are particularly important when the Web site  
displaying the pages is a business. A user is more likely to explore a web site that shows  
images of the items for sale. In a Web-based business, such as an auction site, in which the  
20 inventory turns over rapidly, regenerating one or more web pages to display new images is  
especially important. However, choosing the new images to display is currently a manual

process and thus cannot be accomplished as rapidly as may be desirable. Furthermore, once the images are selected, they must be integrated with the other content on the web page.

Therefore, it would be advantageous to provide for the dynamic selection of images for web pages and for the automatic integration of the selected images to permit frequent and rapid

5 modifications of the web pages.

### SUMMARY OF THE INVENTION

The above-mentioned shortcomings, disadvantages and problems are addressed by the present invention, which will be understood by reading and studying the following  
10 specification.

A gallery widget provides for the automatic selection and integration of images in a markup language document, such as a web page. A widget tag is encoded on the web page that invokes the gallery widget when the page is being processed for display. The gallery widget is a utility program that selects a pre-determined number of images from a group of  
15 images and places the images on the web page. The number of images and their location on the web page are specified in the widget tag. The gallery widget can select the images from a gallery that contains all available images or from a pool of images created from the gallery using a gallery administration tool.

Because the gallery widget is automatically invoked when the page is being readied for  
20 display, there is no manual intervention required so web pages encoded with the widget tag can be regenerated as frequently as necessary to maintain current images on the pages. When

it is desirable to choose certain types of images during a time period, such as for promotional purposes, the gallery administration tool allows a user to create a pool of images having common characteristics in advance.

The present invention describes systems, methods, and computer-readable media of varying scope. In addition to the aspects and advantages of the present invention described in this summary, further aspects and advantages of the invention will become apparent by reference to the drawings and by reading the detailed description that follows.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

FIG. 1 is a diagram of one embodiment of a transaction facility suitable for practicing the present invention;

FIGs. 2A-B are block diagrams illustrating two embodiments of the invention;

FIGs. 3A-B are flowcharts of a gallery widget method to be performed by a computer according to an embodiment of the invention;

FIG. 4 is a flowchart of a gallery administration tool method to be performed by a computer according to an embodiment of the invention; and

FIG. 5 is a diagram of one embodiment of an hardware and software operating environment suitable for practicing the present invention.

## DETAILED DESCRIPTION OF THE INVENTION

In the following detailed description of embodiments of the invention, reference is made to the accompanying drawings in which like references indicate similar elements, and in which is shown by way of illustration specific embodiments in which the invention may be practiced. These embodiments are described in sufficient detail to enable those skilled in the art to practice the invention, and it is to be understood that other embodiments may be utilized and that logical, mechanical, electrical and other changes may be made without departing from the scope of the present invention. The following detailed description is, therefore, not to be taken in a limiting sense, and the scope of the present invention is defined only by the appended claims.

An overview of a network-based transaction facility in which embodiments of the invention may be practiced is first described to provide a context for the invention. Next the operations and methods of the invention are described in conjunction with block diagrams and flowcharts. An exemplary computer hardware and software environment suitable for use with the invention are then described. Finally a conclusion of the detailed description is presented.

### Transaction Facility

The following description of FIG. 1 is intended to provide an overview of a network-based transaction facility (e.g., business-to-business, business-to-consumer and consumer-to-consumer Internet marketplaces and retailers) but is not intended to limit the applicable computer environments. One of skill in the art will immediately appreciate that the invention



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can be practiced with other computer system configurations, including hand-held devices, multiprocessor systems, microprocessor-based or programmable consumer electronics, network PCs, minicomputers, mainframe computers, and the like. For the purposes of the present specification, the term "transaction" shall be taken to include any communications  
5 between two or more entities and shall be construed to include, but not be limited to, commercial transactions including sale and purchase transactions, auctions and the like.

While exemplary embodiments of the present invention is described within the context of an Internet auction facility 10 as shown in FIG. 1, it will be appreciated by those skilled in the art that the invention will find application in many different types of computer-based, and  
10 network-based, commerce facilities.

The auction facility 10 includes one or more of a number of types of front-end servers, namely page servers 12 that deliver web pages (e.g., markup language documents), picture servers 14 that dynamically deliver images to be displayed within web pages, listing servers 16, CGI servers 18 that provide an intelligent interface to the back-end of facility 10, and  
15 search servers 20 that handle search requests to the facility 10. E-mail servers 21 provide automated e-mail communications to users of the facility 10 and other services as known in the art.

The back-end servers include a database engine server 22, a search index server 24 and a credit card database server 26, each of which maintains and facilitates access to a respective  
20 database.



image record contains data associated with an auction item represented by the image, such as an identifier for the item, a category for the item, a date and time for the end of the auction for the item, and an address for the image itself. The widget tag is encoded on the web page 205 in a proprietary format that identifies the gallery widget, specifies the number of images required, and defines the display parameters for the images. Additional parameters, such as a category identifier for the images, can also be included. At periodic intervals, the web page 205 is regenerated by compiling the page source code into standard HTML code suitable for display by a browser, such as Internet Explorer. When the compiler processes the widget tag, it invokes the gallery widget 203 to select the images for the page 205. Thus, for example, when a web home page contains a widget tag of the format,

<Home Page Gallery, categoryID=M, numitems=N, picwidth=X, picheight=Y,  
picspace=Z, numrows=R, numcols=C>,

the text "Home Page Gallery" identifies which gallery widget should be invoked when the home page is compiled, M identifies a particular category of images to be displayed on the home page, N specifies the number of images, and the combination of X, Y, Z, R and C defines the coordinates on the home page for the image locations.

In an alternate embodiment illustrated in FIG. 2B, a gallery administration tool 213 pre-selects a certain number of images from the Gallery 201 to form a gallery pool data structure 215. The gallery administration tool 213 compares the images in the gallery 201 with various filtering criteria and allocates those images that meet the filtering criteria to the gallery pool 215. When the web page 205 is being prepared for display, the gallery widget

203 selects the required number of images from the gallery pool 215 rather than from the full Gallery 201. The gallery pool 215 may be used to hold images having common criteria, such as an expiration date or category. More than one image pool 215 can be created, as shown in phantom in FIG. 2B.

5           When used in conjunction with the auction facility 10 of FIG. 1, the gallery administration tool 211 is periodically executed by a user to choose the images for the pool 203 that will be available for display during the next time period based on filtering criteria input by the user. The criteria may be predicated on the occurrence of a special promotion or a particular theme such as a holiday. So, for example, a marketing employee could choose a  
10   large number of appropriate holiday images to fill the pool but would not have to know exactly how many images may be used. The user is also given the option of deleting individual items from the image pool 203 and for purging all images associated with items no longer at auction. Information from the Gallery thumbnail image records that match the filtering criteria are used to create the set of gallery pool records.

15           The system level overview of the operation of an embodiment of the invention has been described in this section of the detailed description. A gallery widget has been described that automatically selects and places images on a web page when a widget tag encoded on the web page invokes the widget. The gallery widget can select the images from a Gallery data structure containing all available images or from one or more gallery image pool data  
20   structures created by a gallery administration tool using pre-determined filtering criteria.

While the invention is not limited to any particular widget tag, for sake of clarity a specific tag

format has been described. It will be appreciated that the description of the invention in terms of a web page encompasses all documents written in any markup language.

### Methods of Embodiments of the Invention

5 In the previous section, a system level overview of the operations of embodiments of the invention was described. In this section, the particular methods of the invention are described in terms of computer software with reference to a series of flowcharts. The methods to be performed by a computer constitute computer programs made up of computer-executable instructions. Describing the methods by reference to a flowchart enables one skilled in the art to develop such programs including such instructions to carry out the methods on suitably configured computers (the processor of the computer executing the instructions from computer-readable media) If written in a programming language conforming to a recognized standard, such instructions can be executed on a variety of hardware platforms and for interface to a variety of operating systems. In addition, the present invention is not described with reference to any particular programming language. It will be appreciated that a variety of programming languages may be used to implement the teachings of the invention as described herein. Furthermore, it is common in the art to speak of software, in one form or another (e.g., program, procedure, process, application, module, logic...), as taking an action or causing a result. Such expressions are merely a shorthand way of saying that execution of the software by a computer causes the processor of the computer to perform an action or a produce a result.

Referring first to FIG. 3A, the acts to be performed by a computer executing a gallery widget method 300 are shown. When the gallery widget is invoked during the preparation of a web page, the method 300 determines the number of images (N) specified in the gallery widget tag (block 301) and calls a random number generator, such as one commonly provided by computer operating system, requesting N random numbers (block 303). The method 300 retrieves N images using each random number as an index into either the Gallery or the gallery pool data structure (block 305). The determination to use the Gallery or one of the gallery pools may be coded in the widget or may be driven by an additional parameter in the widget tag. The retrieved images are then placed on the page at the locations specified in the gallery widget tag (block 309).

In an alternate embodiment also illustrated in FIG. 3A, the method 300 can perform an optional validation method on the images retrieved (block 307, shown in phantom). An embodiment of such a validation method 310 illustrated in FIG. 3B validates each of the images against four criteria. If the image has expired (block 311), is not an appropriate category (block 313), has been recently used (block 315), or is a duplicate of an already selected image (block 317), then another image is retrieved from either the Gallery or gallery pool to replace it (block 319). Once all images have been evaluated (blocks 321, 323), the validation method 310 returns to the gallery widget method 300. It will be appreciated that fewer or more than four criteria can be incorporated into a validation method without exceeding the scope of the invention.

Turning now to FIG. 4, one embodiment of a gallery administration tool method 400 is described. The administration tool method 400 allows a user to add (block 401) or delete (block 403) individual image records, or purge an entire group of records from the gallery pool. When the user has completed all desired work on the pool (block 409), the method 400 exits.

If the user wishes to add an image record to the pool, he/she inputs filtering criteria (block 411), which is used to retrieve a matching record from the Gallery (block 413). The appropriate information from the Gallery record is used to create a corresponding record in the image pool (block 421). As many additional matching records can be added by user as desired (block 423) or new filtering criteria can be input (block 425).

The blocks in phantom in FIG. 4 illustrates an embodiment of the gallery administration tool that screens the selected image (block 415) to prevent, for example, an image with an offensive title from being displayed. Any image that fails the screening (block 417) is discarded (block 419) and another image selected (block 413). The screening at block 415 can be automatic based on some pre-determined standards or can be performed manually by the user.

When the user wants to delete individual images from the pool, an identifier for the image record (e.g. the identifier for the item represented by the image) is obtained from the user (block 427). The corresponding image is then deleted from the pool (block 429). If there are more images to delete (block 431), the user is given the opportunity to input another image record identifier.

The pool may need to be purged of images periodically, such as when the items represented by the images are not longer available on the web site. The user inputs purging criteria (block 405) and administration tool method 400 identifies and deletes the matching records (block 407).

5           One of skill in the art will immediately appreciate that while the administration tool has been described as an interactive program, the method 400 is equally applicable to being executed as a batch program driven by a set of parameters previously input by a user.

10           The particular methods performed by computer implementing an embodiment of the gallery widget and gallery administration tool have been described. The method performed for the gallery widget has been shown by reference to flowcharts in FIGs. 3A-B including all the acts from 301 until 323. The method performed for the gallery administration tool has been shown by reference to a flowchart in FIG. 4 including all the acts from 401 until 431.

#### Operating Environment

15           The following description of FIG. 5 is intended to provide an overview of computer hardware and other operating components suitable for implementing the invention, but is not intended to limit the applicable environments. FIG. 5 shows a diagrammatic representation of a machine in the exemplary form of a computer system 300 within which a set of instructions, for causing the machine to perform any one of the methodologies discussed above, may be  
20           executed. In alternative embodiments, the machine may comprise a network router, a network switch, a network bridge, Personal Digital Assistant (PDA), a cellular telephone, a web



appliance or any machine capable of executing a sequence of instructions that specify actions to be taken by that machine.

FIG. 5 shows one example of a conventional computer system that can be used as client or server machines. The computer system 500 includes a processor 502, a main memory 504 and a static memory 506, which communicate with each other via a bus 508. The computer system 500 may further include a video display unit 510 (e.g., a liquid crystal display (LCD) or a cathode ray tube (CRT)). The computer system 500 also includes an alpha-numeric input device 512 (e.g. a keyboard), a cursor control device 514 (e.g. a mouse), a disk drive unit 516, a signal generation device 520 (e.g. a speaker) and a network interface device 522, such as a modem.

The disk drive unit 516 represents non-volatile storage such as a magnetic hard disk, an optical disk, or another form of storage for large amounts of data, and includes a machine-readable medium 524 on which is stored a set of instructions (i.e., software) 526 embodying any one, or all, of the methodologies described above. The software 526 is also shown to reside, completely or at least partially, within the main memory 504 and/or within the processor 502 such as when it is written, often by a direct memory access process, into the main memory 504 during execution of the software by the processor 502. One of skill in the art will immediately recognize that the term "machine-readable medium" includes any type of storage device capable of storing or encoding a sequence of instructions for execution by the processor 502 that causes the machine to perform any one of the methodologies of the present invention. The term "machine-readable medium" (or "computer-readable") shall accordingly

be taken to include, but not be limited to, solid-state memories, optical and magnetic disks, and carrier wave signals that encode data signals such as when the software 526 is transmitted or received via the network interface device 522 from/to external systems.

It will be appreciated that the modem or network interface device 522 can be considered to be part of the computer system 500. This interface device 522 can be an analog modem, ISDN modem, cable modem, token ring interface, satellite transmission interface (e.g. "Direct PC"), or other interfaces for coupling a computer system to other computer systems. The computer system 500 and the external systems can be connected in a local area network (LAN) configuration or in a wide-area network WAN configuration (generically represented as network 523). The LAN and WAN can be either public or private networks. One of the most widely used public WANs is the Internet. The term "Internet" as used herein refers to a network of networks which uses certain protocols, such as the TCP/IP protocol, and possibly other protocols such as the hypertext transfer protocol (HTTP) for hypertext markup language (HTML) documents that make up the World Wide Web. The physical connections of the Internet and the protocols and communication procedures of the Internet are well known to those of skill in the art.

It will be appreciated that the computer system 500 is one example of many possible computer systems which have different architectures. For example, personal computers based on an Intel microprocessor often have multiple buses, one of which can be considered to be a peripheral bus. Network computers are another type of computer system that can be used with the present invention. Network computers do not usually include a hard disk or other mass

storage, and the executable programs are loaded from a network connection into the memory  
504 for execution by the processor 502. A Web TV system, which is known in the art, is also  
considered to be a computer system according to the present invention, but it may lack some  
of the features shown in FIG. 5, such as certain input or output devices. A typical computer  
5 system will usually include at least a processor, memory, and a bus coupling the memory to  
the processor.

It will also be appreciated that the computer system 500 is controlled by operating  
system software which includes a file management system, such as a disk operating system,  
which is part of the operating system software. One example of an operating system software  
10 with its associated file management system software is the operating system known as  
Windows '95<sup>®</sup> from Microsoft Corporation of Redmond, Washington, and its associated file  
management system. The file management system is typically stored in the non-volatile  
storage 516 and causes the processor 502 to execute the various acts required by the operating  
system to input and output data and to store data in memory, including storing files on the  
15 non-volatile storage 516.

### Conclusion

A gallery widget that provides for the automatic selection and integration of images on  
markup language documents, such as web pages, has been described. In one aspect, the  
20 gallery widget selects the images from a gallery containing all the available images. In  
another aspect, a supporting gallery administration tool creates a pool of images from those in

the gallery and the gallery widget selects the images for the web pages from the pool.

Although specific embodiments have been illustrated and described herein, it will be appreciated by those of ordinary skill in the art that any arrangement which is calculated to achieve the same purpose may be substituted for the specific embodiments shown. This

5 application is intended to cover any adaptations or variations of the present invention.

For example, one of skill in the art will immediately recognize that the invention is not limited to use with an auction web site as described herein, but is suitable for use on with any web-based business that requires a frequent rotation of images on its web site pages.

Furthermore, although the invention has been described in conjunction with its use on the

10 World Wide Web, it will be appreciated that the invention is equally applicable in any environment in which images are presented to a user in documents written in a markup language, and that the terminology used in this application is meant to include all environments that incorporate a markup language. Therefore, it is manifestly intended that this invention be limited only by the following claims and equivalents thereof.

## CLAIMS

What is claimed is:

1 1. A computerized method for dynamically selecting images for a markup language  
2 document comprising:  
3 encoding an instruction in the markup language document, the instruction  
4 identifying a utility program that dynamically selects an image for insertion into the  
5 document;  
6 preparing the markup language document for display;  
7 invoking the utility program when the instruction is processed;  
8 selecting a pre-determined number of images from a group of images, the pre-  
9 determined number being specified in the instruction; and  
10 placing the pre-determined number of images in the markup language document at  
11 locations defined in the instruction.

1 2. The computerized method of claim 1, wherein the group of images comprises a  
2 gallery containing images available for display.

1 3. The computerized method of claim 1, wherein the group of images comprises a  
2 pool of images and further comprising:  
3 choosing the images for the pool from a gallery containing images available for  
4 display using an administration tool.

1 4. The computerized method of claim 3, wherein choosing the images for the pool  
2 comprises:  
3 obtaining filtering criteria;

4 identifying an image from the gallery based on the filtering criteria; and  
5 adding the identified image to the pool.

1 5. The computerized method of claim 4 further comprising:  
2 examining information associated with the image against a set of standards; and  
3 discarding the image if the information does not meet the standards.

1 6. The computerized method of claim 4 further comprising:  
2 deleting an image from the pool.

1 7. The computerized method of claim 1, wherein the markup language document is a  
2 web page and the instruction is a tag in a proprietary format.

1 8. The computerized method of claim 7, wherein the utility is invoked when the tag  
2 in the proprietary format is processed during a compile of the web page.

1 9. The computerized method of claim 7, wherein the proprietary format comprises:  
2 <widget identifier, number of images, display parameters>.

1 10. The computerized method of claim 9, wherein the display parameters comprise a  
2 size parameter and a location parameter.

1 11. The computerized method of claim 7, wherein the proprietary format comprises:  
2 <widget identifier, category identifier, number of images, display parameters>

1 12. The computerized method of claim 1 further comprising:

2 validating the pre-determined number of images against validation criteria; and  
3 substituting a different image for an image that fails the validation.

1 13. A computer-readable medium having stored thereon executable instructions for  
2 causing a computer to perform a method for dynamically selecting images for a markup  
3 language document comprising:

4 determining a number of images to display in the markup language document;  
5 obtaining a set of random numbers corresponding to the number of images;  
6 retrieving images from a group of images using the set of random numbers; and  
7 placing the retrieved images in the document.

1 14. The computer-readable medium of claim 13 having further executable instructions  
2 comprising:

3 validating the retrieved images against validation criteria; and  
4 retrieving a replacement image from the group of images if a retrieved image fails  
5 the validation.

1 15. The computer-readable medium of claim 13 having further executable instructions  
2 comprising:

3 determining a location in the document for each of the retrieved images from an  
4 instruction embedded in the document.

1 16. A computer-readable medium having stored thereon executable instructions for  
2 causing a computer to perform a method for creating a pool of images available for  
3 display in a markup language document comprising:

4 obtaining filtering criteria;





1 21. The computer system of claim 19, wherein the instruction specifies the number of  
2 images to display.

1 22. The computer system of claim 19, wherein the computer-readable medium further  
2 comprises an administration program that causes the processing unit to create a group of  
3 images from which to select the number of images.

1 23. The computer system of claim 19, wherein the computer system is a web server  
2 and the markup language document is a web page.

1 24. The computer system of claim 23, wherein the web page contains images of items  
2 being auctioned on a web site hosted by the web server.

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## ABSTRACT OF THE DISCLOSURE

A gallery widget is invoked when a tag in a markup language document, such as a web page, is processed. The gallery widget selects a number of images specified in the tag and places the images in the markup language document as defined by the tag. The images are  
5 selected from a gallery containing all images available for display or from a pool of images chosen from the gallery using a gallery administration tool.

003801.P025

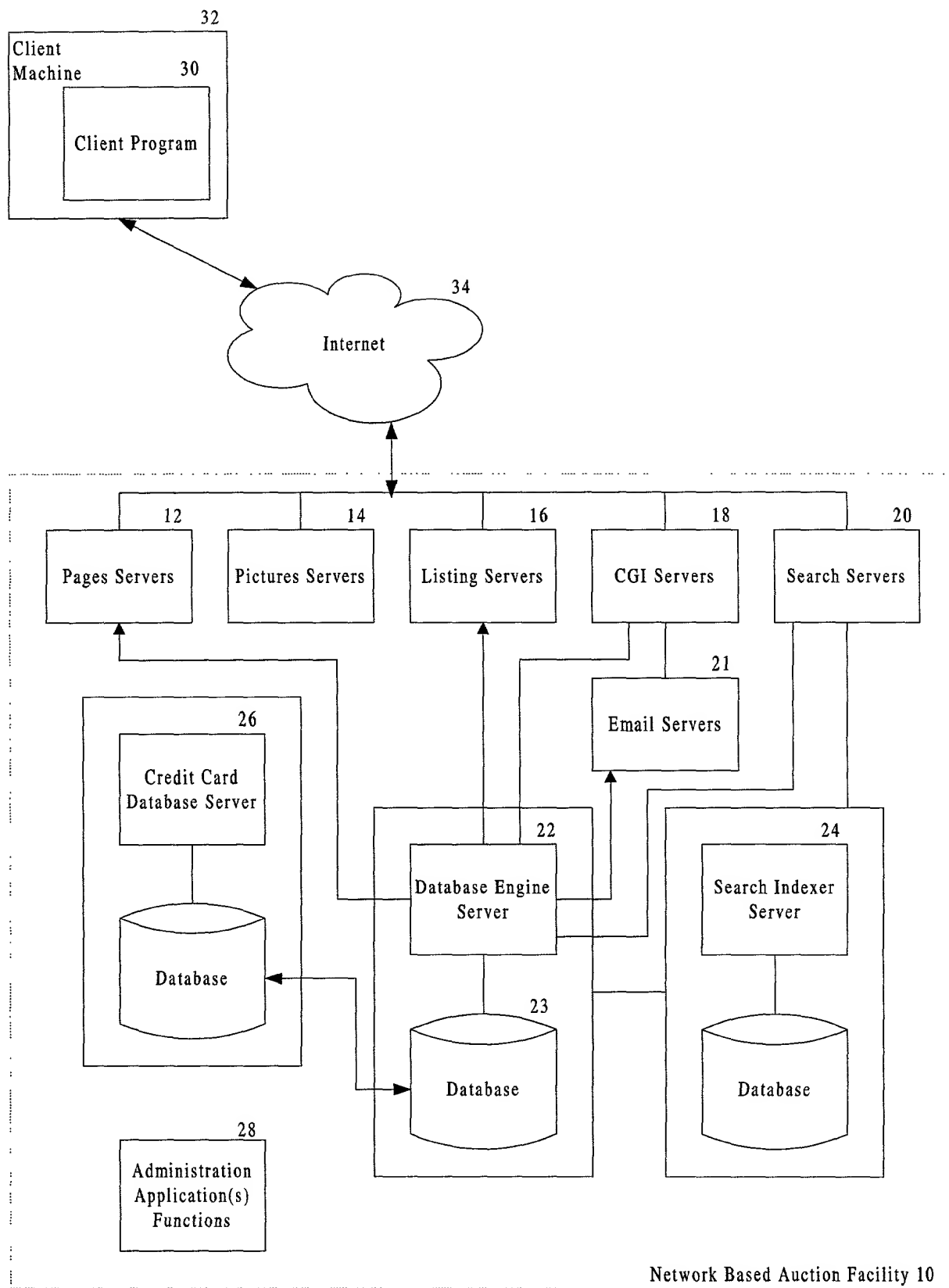


FIG. 1

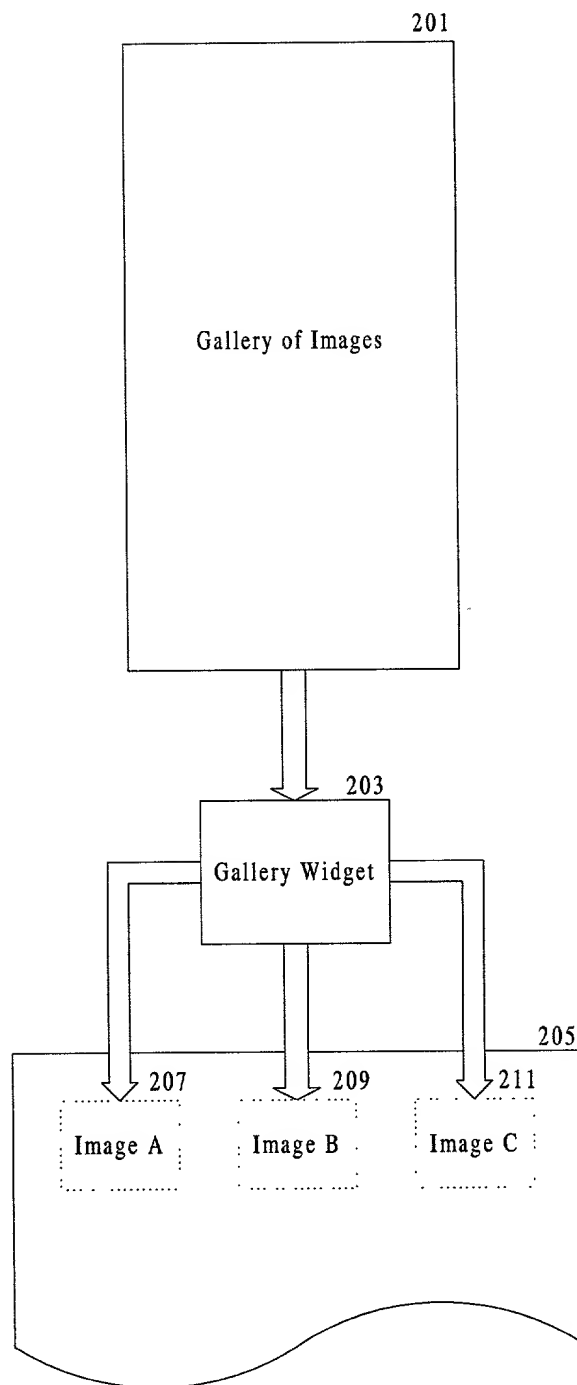


FIG. 2A

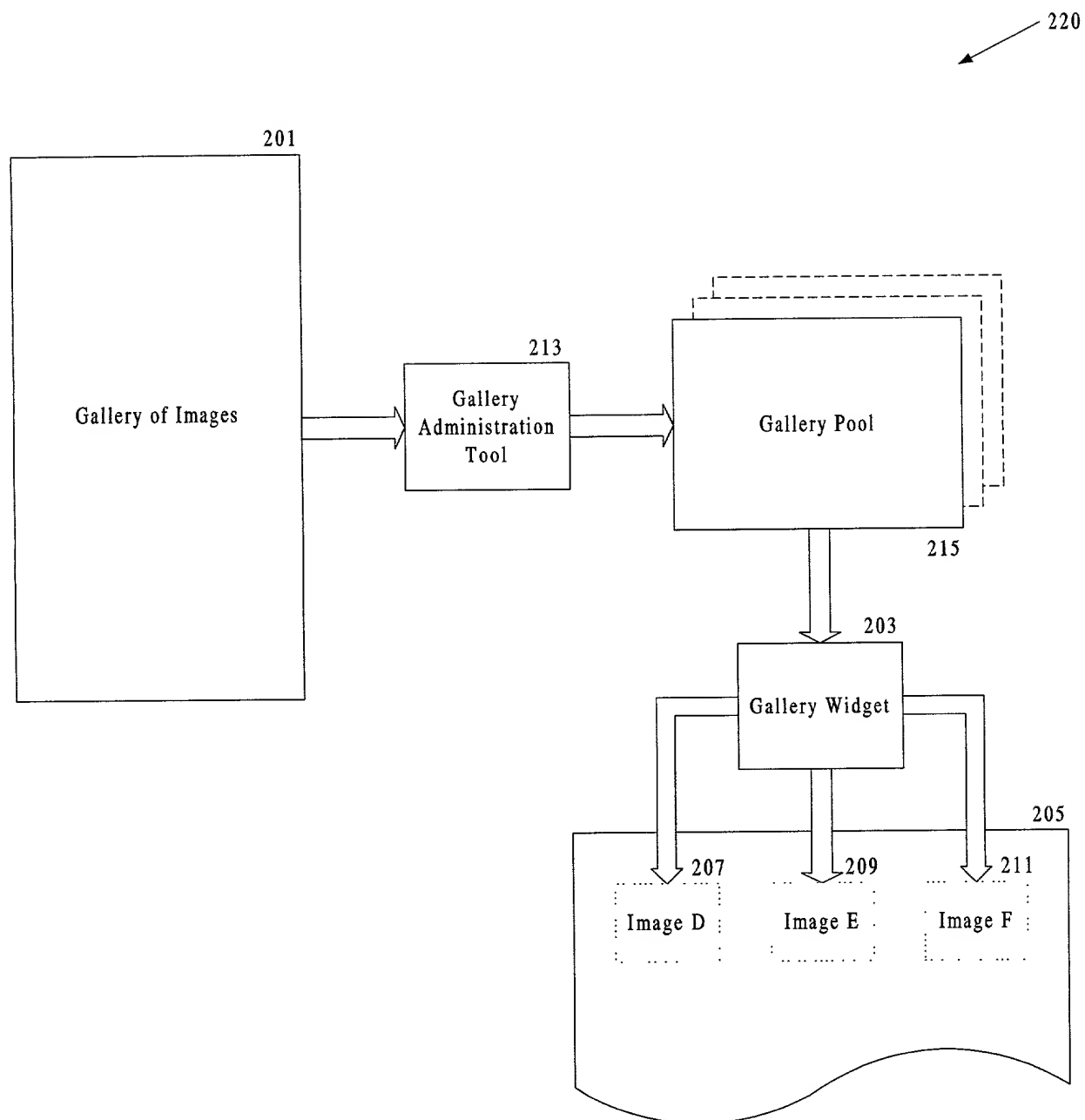


FIG. 2B

300

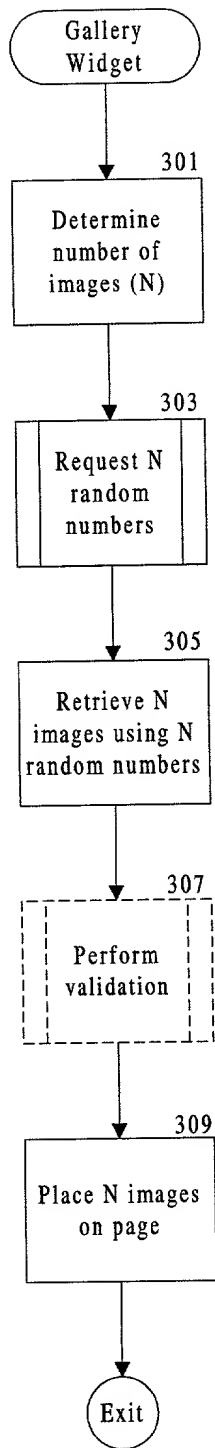


FIG. 3A

310

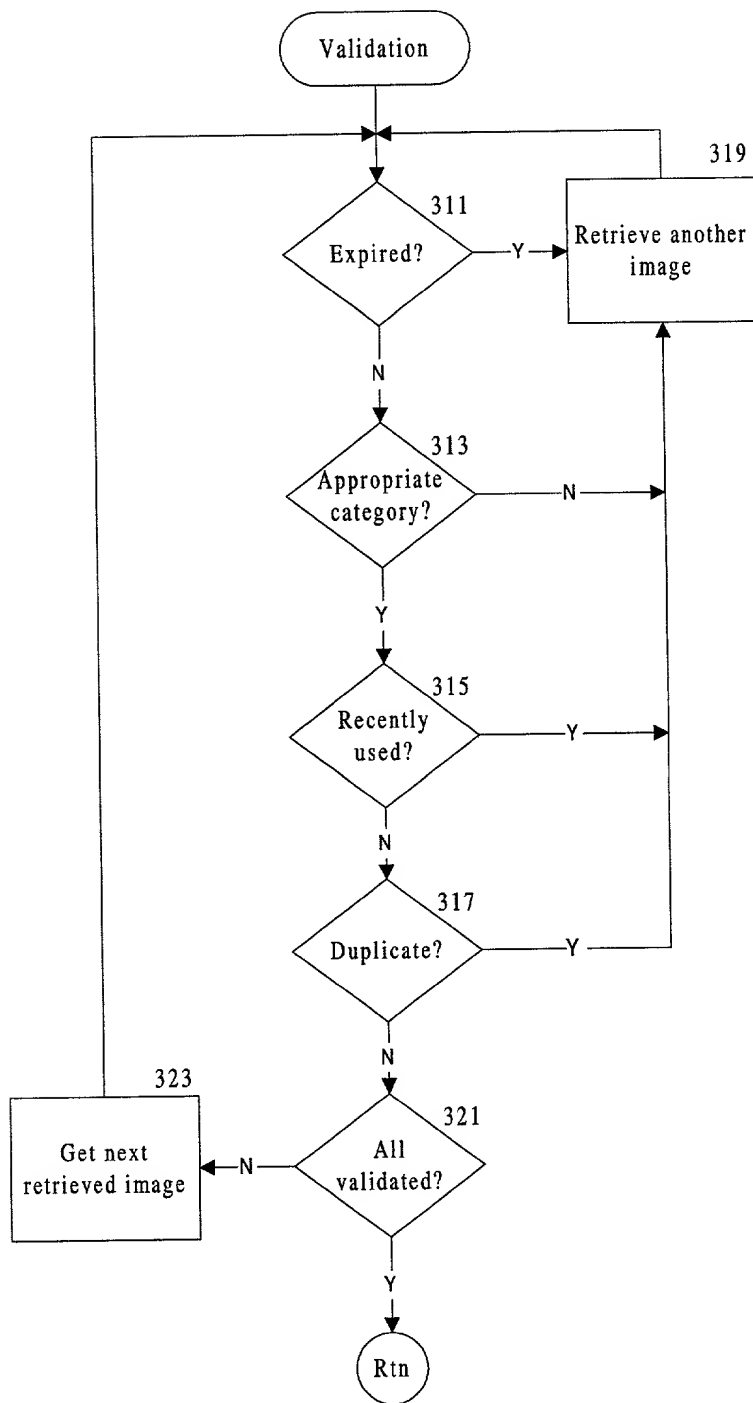


FIG. 3B

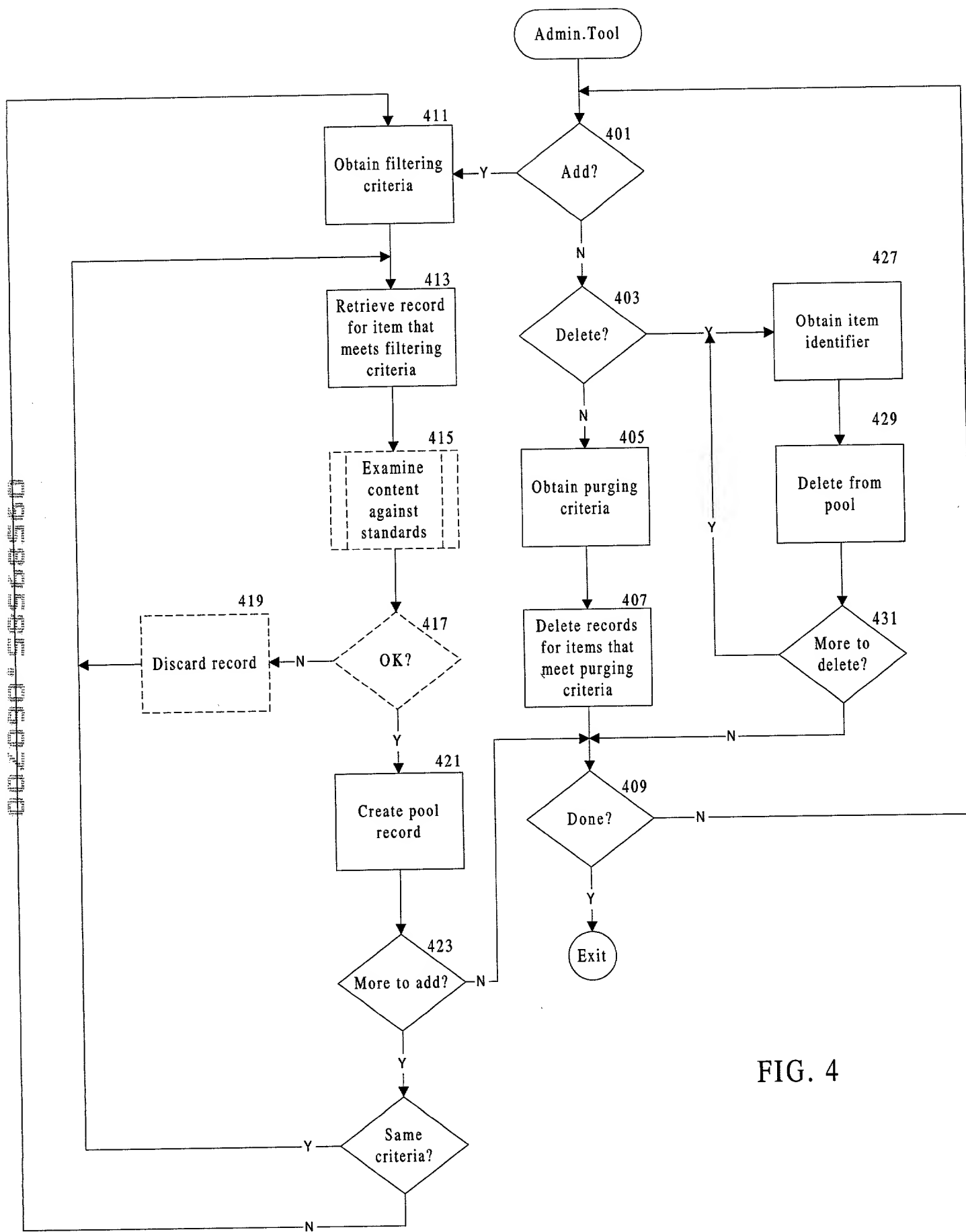


FIG. 4





DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below, next to my name.

I believe I am the original, first, and sole inventor (if only one name is listed below) or an original, first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled  
DYNAMIC SELECTION OF IMAGES FOR WEB PAGES

the specification of which

X is attached hereto.  
\_\_\_\_\_ was filed on \_\_\_\_\_ as  
United States Application Number \_\_\_\_\_  
or PCT International Application Number \_\_\_\_\_  
and was amended on \_\_\_\_\_  
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above. I do not know and do not believe that the claimed invention was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, and that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months (for a utility patent application) or six months (for a design patent application) prior to this application.

I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d), of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

002090" 58553560

Prior Foreign Application(s)

Priority  
Claimed

_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<u>Yes</u>	<u>No</u>
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<u>Yes</u>	<u>No</u>
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<u>Yes</u>	<u>No</u>

I hereby claim the benefit under title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below:

_____ (Application Number)	_____ Filing Date
_____ (Application Number)	_____ Filing Date

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

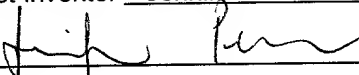
_____ (Application Number)	_____ Filing Date	_____ (Status -- patented, pending, abandoned)
_____ (Application Number)	_____ Filing Date	_____ (Status -- patented, pending, abandoned)

I hereby appoint the persons listed on Appendix A hereto (which is incorporated by reference and a part of this document) as my respective patent attorneys and patent agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.

Send correspondence to Sheryl Sue Holloway, BLAKELY, SOKOLOFF, TAYLOR &  
(Name of Attorney or Agent)  
ZAFMAN LLP, 12400 Wilshire Boulevard 7th Floor, Los Angeles, California 90025 and direct  
telephone calls to Sheryl Sue Holloway, (408) 720-8300.  
(Name of Attorney or Agent)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

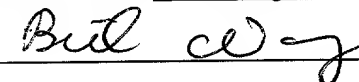
Full Name of Sole/First Inventor Jennifer Pearson

Inventor's Signature  Date 6/1/00

Residence San Jose, California Citizenship United States  
(City, State) (Country)

Post Office Address 4694 La Crescent Loop  
San Jose, CA 95136

Full Name of Second/Joint Inventor Bill Wang

Inventor's Signature  Date 06/01/00

Residence San Jose, California Citizenship China  
(City, State) (Country)

Post Office Address 2777 Bungalow Court  
San Jose, CA 95125

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## APPENDIX A

William E. Alford, Reg. No. 37,764; Farzad E. Amini, Reg. No. P42,261; Aloysius T. C. AuYeung, Reg. No. 35,432; William Thomas Babbitt, Reg. No. 39,591; Carol F. Barry, Reg. No. 41,600; Jordan Michael Becker, Reg. No. 39,602; Bradley J. Berezna, Reg. No. 33,474; Michael A. Bernadicou, Reg. No. 35,934; Roger W. Blakely, Jr., Reg. No. 25,831; Gregory D. Caldwell, Reg. No. 39,926; Ronald C. Card, Reg. No. 44,587; Andrew C. Chen, Reg. No. 43,544; Thomas M. Coester, Reg. No. 39,637; Alin Corie, Reg. No. P46,244; Dennis M. deGuzman, Reg. No. 41,702; Stephen M. De Klerk, under 37 C.F.R. § 10.9(b); Michael Anthony DeSanctis, Reg. No. 39,957; Daniel M. De Vos, Reg. No. 37,813; Robert Andrew Diehl, Reg. No. 40,992; Sanjeet Dutta, Reg. No. P46,145; Matthew C. Fagan, Reg. No. 37,542; Tarek N. Fahmi, Reg. No. 41,402; Paramita Ghosh, Reg. No. 42,806; James Y. Go, Reg. No. 40,621; James A. Henry, Reg. No. 41,064; Willmore F. Holbrow III, Reg. No. P41,845; Sheryl Sue Holloway, Reg. No. 37,850; George W. Hoover II, Reg. No. 32,992; Eric S. Hyman, Reg. No. 30,139; William W. Kidd, Reg. No. 31,772; Sang Hui Kim, Reg. No. 40,450; Eric T. King, Reg. No. 44,188; Erica W. Kuo, Reg. No. 42,775; Kurt P. Leyendecker, Reg. No. 42,799; Michael J. Mallie, Reg. No. 36,591; Andre L. Marais, under 37 C.F.R. § 10.9(b); Paul A. Mendonsa, Reg. No. 42,879; Darren J. Milliken, Reg. No. 42,004; Lisa A. Norris, Reg. No. 44,976; Chun M. Ng, Reg. No. 36,878; Thien T. Nguyen, Reg. No. 43,835; Thinh V. Nguyen, Reg. No. 42,034; Dennis A. Nicholls, Reg. No. 42,036; Daniel E. Ovanezian, Reg. No. 41,236; Marina Portnova, Reg. No. P45,750; Babak Redjaian, Reg. No. 42,096; William F. Ryann, Reg. No. 44,313; James H. Salter, Reg. No. 35,668; William W. Schaal, Reg. No. 39,018; James C. Scheller, Reg. No. 31,195; Jeffrey Sam Smith, Reg. No. 39,377; Maria McCormack Sobrino, Reg. No. 31,639; Stanley W. Sokoloff, Reg. No. 25,128; Judith A. Szepesi, Reg. No. 39,393; Vincent P. Tassinari, Reg. No. 42,179; Edwin H. Taylor, Reg. No. 25,129; John F. Travis, Reg. No. 43,203; George G. C. Tseng, Reg. No. 41,355; Joseph A. Twarowski, Reg. No. 42,191; Lester J. Vincent, Reg. No. 31,460; Glenn E. Von Tersch, Reg. No. 41,364; John Patrick Ward, Reg. No. 40,216; Mark L. Watson, Reg. No. P46,322; Thomas C. Webster, Reg. No. P46,154; Charles T. J. Weigell, Reg. No. 43,398; Kirk D. Williams, Reg. No. 42,229; James M. Wu, Reg. No. 45,241; Steven D. Yates, Reg. No. 42,242; and Norman Zafman, Reg. No. 26,250; my patent attorneys, and Justin M. Dillon, Reg. No. 42,486; my patent agent, of BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP, with offices located at 12400 Wilshire Boulevard, 7th Floor, Los Angeles, California 90025, telephone (310) 207-3800, and James R. Thein, Reg. No. 31,710, my patent attorney.

## APPENDIX B

### Title 37, Code of Federal Regulations, Section 1.56 Duty to Disclose Information Material to Patentability

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) Prior art cited in search reports of a foreign patent office in a counterpart application, and
  - (2) The closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.
- (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
  - (2) It refutes, or is inconsistent with, a position the applicant takes in:
    - (i) Opposing an argument of unpatentability relied on by the Office, or
    - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) Each inventor named in the application;
  - (2) Each attorney or agent who prepares or prosecutes the application; and
  - (3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.
- (d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.